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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,699

05/19/2006

Joachim Rothe

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9695

30565

7590

01/23/2009

WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP
111 MONUMENT CIRCLE, SUITE 3700
INDIANAPOLIS, IN 46204-5137

EXAMINER

LOUDEN, CLIFFORD J

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

01/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,699	Applicant(s) ROTHE ET AL.	
	Examiner CLIFFORD J. LOUDEN	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/19/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/19/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jessop, US 2,449,654 in view of Hornig et al. US 4,182,139 (Hornig). Jessop shows in Figs. 1-2 a flexible coupling for mutually connecting two shaft ends (Col. 2, L8-20), in particular in the drive train of a motor vehicle (Col. 1, L1-3), having a flexible disk (14) made of rubber-elastic material, which has a central axis, at least two first and two second connection bodies (20), which are inserted alternately, with their own axis parallel to the central axis, around the axis, at angular distances from one another into the flexible disk and are intended to be fastened each to one of the shaft ends, and a centering device for mutually centering the two shaft ends, characterized in that the centering device comprises a first and a second end plate (10, 11), which are arranged centered in relation to one another each against one end face of the flexible disk and are pivotable about a joint center lying on the central axis, and independently of their subsequent fastening to the first and/or second shaft end the first connection bodies are fastened to the first end plate and the second connection bodies to the second end plate rigidly and securely against rotation.

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Jessop does not expressly disclose flexible inserts which are embedded in the flexible disk and extend around adjacent connection bodies. Hornig teaches flexible inserts (11, 12) which are embedded in the flexible disk and extend around adjacent connection bodies which are stiff against torsion and as a result provides a centering action. At the time of the invention, it would have been obvious to one having ordinary skill in the art to provide the flexible coupling of Jessop with the flexible inserts as taught by Hornig to improve the coupling to stiffen the connection bodies against torsion.

2: Jessop shows in Fig. 2 the two end plates each have a collar (the inner portions of 12 & 13) engaging into the flexible disk and are centered in relation to one another by means of said collars.

3: Jessop shows in Fig. 2 the two end plates each have a collar embracing the flexible disk radially at the outside and are centered in relation to one another by means of said collars.

4: Jessop shows in Fig. 2 the two end plates are held by means of their collars in axial abutment with the flexible disk.

As to claim 5, Jessop does not expressly disclose the connection bodies, at the edge of a hole of the associated end plate that receives them, are welded to said end plate. However, at the time of the invention, it would have been obvious to one having ordinary skill in the art, to weld the connection bodies, at the edge of the hole, to the associated end plate, as these are both metal portions, in order to provide a secure connection therebetween.

6: Jessop shows in Fig. 2 the connection bodies in each case by means of an anchoring profile (items 20-25) formed thereon are anchored securely against rotation on the

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associated end plate.

7: Jessop shows in Fig. 6 the connection bodies are inserted in each case into a sleeve (41), which is associated with and embedded in the flexible disk and around which at least one of the flexible inserts is looped.

8: Jessop shows in Fig. 6 the sleeve is connected to the associated connection body such as to transmit tensile forces in the direction of the axis of said connection body and the associated end plate is therefore held in abutment with the flexible disk (Col. 4, L1-16).

9: Jessop shows in Fig. 2 the connection bodies each have a flange (22) for effecting fastening to the associated end plate.

10: Jessop shows in Fig. 2 the connection bodies each have a projection (25) for effecting centering on the associated shaft end.

11: Jessop shows in Fig. 2 the flexible disk is held under radial bias by the end plates in combination with the connection bodies.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Venditty (US2396353) discloses a joint and bushing construction. Morlon (US3731499) discloses flexible couplings. Neathery et al. (US4734081) discloses a constant velocity elastomeric bearing unit. Tseng (US5692958) discloses a damping mechanism of driving shafts. Andrä et al. (US6315670) discloses an elastic articulated body. Kotsusa (US7250002) discloses a flexible coupling.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLIFFORD J. LOUDEN whose telephone number is (571)270-5504. The examiner can normally be reached on Monday through Thursday, 8:00AM to 4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner, Art Unit 3679

/CLIFFORD J LOUDEN/
Examiner, Art Unit 3679
January 16, 2009